



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/654,508	09/03/2003	Geert Deroover	224105	4953
23460	7590	10/16/2006		
LEYDIG VOIT & MAYER, LTD TWO PRUDENTIAL PLAZA, SUITE 4900 180 NORTH STETSON AVENUE CHICAGO, IL 60601-6780			EXAMINER JOHNSON, CONNIE P	
			ART UNIT	PAPER NUMBER
			1752	

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/654,508

Applicant(s)

DEROOVER ET AL.

Examiner

Connie P. Johnson

Art Unit

1752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Response to Amendment

1. The remarks and amendment filed July 6, 2006 were entered and fully considered.
2. Claims 1-10 are presented.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 7 and 9 are rejected under 35 U.S.C. 102(b) as being unpatentable by Gaschler et al., U.S. Patent No. 6,238,838 B1.

Gaschler teaches a positive-working, radiation sensitive mixture which contains a hydrophilic organic polymeric binder, a coating, which is soluble in an aqueous alkaline developer and an infrared light absorbing compound (column 1, lines 9-15, 47-56). The IR compound in column 4 (Formula F5) is a cationic IR-absorbing dye and meets the limitations of instant claim 1. Gaschler also teaches that Z¹ and Z² of the infrared compound are preferably isopropylidene groups (-C(CH₃)₂-) as in instant claim 7 (column 3, lines 12-13).

5. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Gaschler et al., U.S. Patent No. 6,492,093.

Gaschler teaches recording materials comprising a substrate and a mixture with a binder layer and a positive-working IR-sensitive dye layer (column 8, lines 1-30). The IR-sensitive dyes may comprise cyanine dyes. The substrate comprises an aluminum surface that has been hydrophilized (column 8, lines 55-61). The oleophilic IR-sensitive dye layer is above the binder layer and is soluble in alkaline developer solution (column 8, lines 5-6). Examples of suitable IR-sensitive dyes include: column 4, Formula (III), column 5, Formula (IV) and column 6, Formulas (F1-F4). The substituted groups of each formula meet the limitations of instant claims 1. The solubilizing groups attached to the cyanine dyes include such anionic groups as carboxylate, sulfonate and phosphonate groups (column 4, lines 14-16). These groups are identified in the specification as solubilizing groups (page 5, lines 1-5). With regards to formulas III and IV of the reference, solubilizing groups include carboxyl and sulfo groups as in instant claim 10 (column 5, line 35). The polymeric binder in the binder layer contains acidic groups with pK_a of less than 13. This ensures that the layer is soluble in aqueous alkaline developers (column 7, lines 1-5).

Response to Arguments

6. Applicant's arguments filed July 6, 2006 have been fully considered but they are not persuasive.

a. Applicant argues that the Gaschler ('838) reference does not teach G^1 and G^2 in the infrared light-absorbing compound. Examiner does not agree. Applicant is directed to claim 1, which claims G^1 and G^2 as alternative substituents to R^1 , R^2 , R^4 and

R⁵ of the compound. The groups G¹ and G² are not required in claim 1. The Gaschler '838 reference reads on instances when R³ is chlorine and Z¹ and Z² are C(CH₃).

b. Applicant argues that Gaschler ('093) does not teach the infrared light-absorbing compound as claimed. Examiner disagrees. Applicant is directed to columns 5 and 6 of the reference, wherein the betaine structures of F1, F2, F3 and F4, p-toluenesulfonate are shown. As Applicant discloses on page 6, paragraph 3 of the arguments, the group in the betaine structure is not aromatic, however aromaticity is not required for R³ in claim 1. R³ may represent an alkenyl group or a halogen group. See the compound of formula F4* where R³ is represented by chlorine. Applicant is further directed to the p-toluenesulfonate structure, wherein the R³ group is chlorine and Z³ comprises non-metallic atoms to form a 5-membered heterocyclic ring. Applicant again raises the issue of the absence of the necessary G¹ and G² groups in the Ganschler '093 reference. The solubilizing groups G¹ and G² are not required in claims. There is no positive recitation of G¹ and G² representing Z³, nor any of R¹, R², R³ or R⁴.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

Art Unit: 1752

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Connie P. Johnson whose telephone number is 571-272-7758. The examiner can normally be reached on 7:30am-4:00pm Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Connie P. Johnson 9/28/06

Connie P. Johnson
Examiner
Art Unit 1752

CYNTHIA H. KELLY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700
Cynthia H. Kelly